

CLAIMS

1. A ligament carrier and suturing device comprising:

an elongate shaft member having a distal end and a proximal end;

5 a needle carrier located at or adjacent the distal end of said elongate shaft member, said needle carrier comprising a rigid arcuate tooth member and having a first end and a second end and being pivotable at the first end about an axis which lies transverse to the longitudinal axis of the shaft member, the needle carrier adapted to carry on the second end thereof a needle with a suture attached thereto;

10 a needle capture means located on the shaft member intermediate the distal and proximal ends thereof, said needle capture device being adapted to engage with and capture the needle carried by the arcuate tooth; and

15 an operating means coupled to the needle carrier and operable to cause the arcuate tooth member to pivot through an arc so that the needle engages with and is captured by the capture device, the operating means being operable from a location at or adjacent said proximal end of the shaft member.

2. A ligament carrier and suturing device according to claim 1, wherein the operating means comprising a connecting rod located within a longitudinal passage extending along said shaft member and being engaged with said needle carrier.

20 3. A ligament carrier and suturing device according to claim 2, wherein the engagement between the connecting rod and the needle carrier comprises a lever arrangement adapted to drive the arcuate tooth through said arc.

25 4. A ligament carrier and suturing device according to claim 2 or claim 3, wherein the needle carrier includes a slot, said connecting rod being slidably engaged with said slot so as to cause the needle carrier to pivot about the first end as said connecting rod moves longitudinally in relation to said shaft member.

5. A ligament carrier and suturing device according to any one of the preceding claims, wherein the needle carrier is biased such that the needle is urged away from said needle capture means.

6. A ligament carrier and suturing device according to any one of the preceding claims, wherein at least a portion of the second end of the needle carrier is hollow to receive the needle therein.

7. A ligament carrier and suturing device according to claim 6, wherein the second
5 end of the needle carrier includes a slot arranged to receive an axially aligned suture connected to the needle such that the suture passes from inside to outside of the needle carrier.

8. A ligament carrier and suturing device according to any one of the preceding claims further comprising a handle means located at or adjacent the proximal end of said shaft member.

10 9. A ligament carrier and suturing device according to claim 8, wherein the handle means is coupled to said operating means such that movement of said handle means causes the needle carrier to be advanced towards said needle capture means.

10. A ligament carrier and suturing device according to claim 9, wherein said handle means is arranged such that the device is held and operated by a single hand of a user.

15 11. A ligament carrier and suturing device according to claim 9 or claim 10, wherein said handle means comprises a moveable lever and a grip, said lever being coupled to said operating means.

20 12. A ligament carrier and suturing device according to any one of the preceding claims, wherein the needle capture means is biased such that when the needle is advanced by said needle carrier to said needle capture means the needle capture means engages with the needle automatically, and when the needle carrier is moved away from the needle capture means, the needle disengages from said needle carrier and remains captured.

25 13. A ligament and suturing device according to any one of claims 1 to 11, wherein the needle capture means is manually operable by a user from the proximal end of the shaft member.

14. A ligament and suturing device according to claim 12 or claim 13, wherein the needle capture means captures the needle by engaging with a recess in the needle.

30 15. A ligament and suturing device according to claim 12 or 13, wherein the needle capture means is manually operable from the proximal end of the shaft member by a user to allow the needle to be released from the needle capture means.

16. A ligament carrier and suturing device substantially as herein described with reference to the accompanying figures 3 to 8.